

# Intel® Performance Communications Appliance Reference Design

## Product Highlights

- Scalable performance using single or dual Intel® Pentium® III processors (600–866 MHz) in the PGA 370 socket
- 256 MB PC 133 SDRAM upgradable to 4 GB
- ServerWorks ServerSet® III HE-SL chipset
  - 133 MHz front-side bus
  - Supports SDRAM memory (PC 133 registered)
  - ECC for enhanced data integrity
- Supports up to six SCSI hard disk drives (4 internally)
- Also supports dual ATA33 hard disk ports
- Flexible networking and I/O capabilities
  - Dual, fully concurrent 64-bit/66 MHz PCI buses; Peer-to-peer transactions between PCI buses
  - 64-bit/66 MHz PCI edge slot supports PCI add-in card while maintaining 1U form factor
  - PCI Mezzanine Card (PMC) standard connector to the 64-bit/66 MHz PCI bus
  - Three Ethernet ports (10/100 Base-T) utilizing the Intel 82559 LAN controller
  - One gigabit over optical port for fast enterprise connectivity
  - Two USB ports
  - One serial port (RS-232)

- Small form factor designed for 1U-sized devices
- Embedded life cycle support for Intel processors

## Product Overview

The Performance Communications Appliance Reference Design contains the essential components for delivering high performance to communication appliances. Communication appliances bring rich new services to the network and include network attached storage, web caching, network security, load balancing, virtual private network (VPN), VoIP, and e-commerce devices. This reference design, developed for OEMs focused on the communication appliance market segment, reduces time-to-market by delivering a complete design that is easily modified without redesigning the core microprocessor and chipset design. The performance, scalability, and reliability of Intel architecture provides an ideal platform for new designs that target this fast-emerging market segment.

This reference design offers communications appliance developers a headstart in their design. It is easily modified to fit custom configurations without modifying the core base compute layout.

## Third Party Vendor Support

Intel works with multiple independent hardware and software vendors to enable the efficient implementation of designs based on the Performance Communications Appliance Reference Design. For more information, visit the Intel Web site at [developer.intel.com/platforms/applied/eiacomm/reference\\_configs.htm](http://developer.intel.com/platforms/applied/eiacomm/reference_configs.htm)

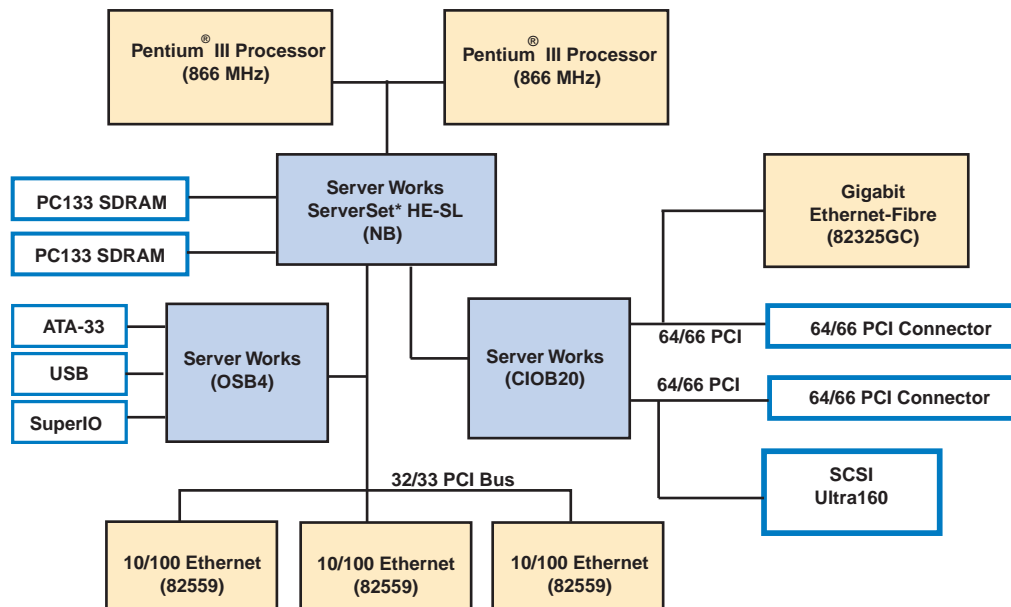
### Independent Hardware Vendor

- Advantech\*
- Force Computers\*
- ICS Advent\*
- Pycon\*
- Diversified Technology\*

### Intel reference design contains

- Bill Of Materials (BOM)
- Schematics (.pdf or ViewLogic\* format)
- Available original equipment manufacturers list

# Performance Communications Appliance Reference Design



Block Diagram

## Intel Access

Developer's Site	<a href="http://developer.intel.com">developer.intel.com</a>
Communications Applied Computing	<a href="http://developer.intel.com/platforms/applied/eiacomm/reference_configs.htm">developer.intel.com/platforms/applied/eiacomm/reference_configs.htm</a>
Embedded Intel Architecture	<a href="http://developer.intel.com/design/intarch">developer.intel.com/design/intarch</a>
Other Intel Support: Intel Literature Center	<a href="http://developer.intel.com/design/litcentr">developer.intel.com/design/litcentr</a> (800) 548-4725 7 a.m. to 7 p.m. CST (U.S. and Canada) International locations please contact your local sales office.
General Information Hotline	(800) 628-8686 or (916) 356-3104 5 a.m. to 5 p.m. PST

Details of the performance reference design may change from those listed here. Please refer to the Web site for Communications Applied Computing for the latest information.

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For more information, visit the Intel Web site at: [developer.intel.com](http://developer.intel.com)



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